

## WHAT IS CLAIMED IS:

1. A printed circuit board having multiple layers, the printed circuit board comprising:

a flat optical cable having a predetermined footprint, the flat optical cable being embedded horizontally within the layers of the printed circuit board;

plural optical vias disposed vertically through one or more layers of the printed circuit board; and

plural mirrors embedded within the printed circuit board and disposed so as to provide from a right angle translation of light between the flat optical cable and corresponding ones of the optical vias;

wherein conduction of light is provided between a surface of the printed circuit board and the flat optical cable by way of the plural optical vias and the plural mirrors.